

REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks.

Claim 1 has been clarified by amendment without significant change to the meaning. Applicant again requests the courtesy of an interview at the earliest possible date in hopes of avoiding the unnecessary cost and efforts required of the undersigned, the client and the Office in appealing the present application.

New claims 37-41 are presented for examination.

Applicant's position is as noted below.

Regarding the New Claims

Applicant submits herewith several new claims which are submitted to include the language almost verbatim from the last paragraph at the bottom of page 4 of the specification. This paragraph and the new claims are adequately detailed in the requirements for the threshold to remove any doubt as to the meaning of the threshold as claimed. Consideration and allowance of these new claims are respectfully requested.

Regarding the Rejection under 35 U.S.C. §112, second paragraph

Applicant respectfully traverses the rejection based upon the contention by the Patent Office that the claims are indefinite. The reason for this rejection, as asserted in the Office Action, is that the "threshold" is indefinite for failure for one of ordinary skill in the art to ascertain the metes and bounds of the claimed threshold. Applicant submits that this simply is not the case.

The Examiner's attention is directed to the text spanning pages 4 and 5 of the specification which are reproduced below:

"...The present invention seeks to improve performance in a large bitmap image scenario by utilizing an analog signal path to transmit analog images rather than digital bitmap images when the bitmap image size exceeds a threshold. An appropriate threshold, can be readily determined experimentally, for example, to

be a bitmap size that results in noticeable delays in display of the digital image. However, this is not to be considered limiting since other systems may deviate from this particular threshold without departing from the present invention.

An example of the type of scenario wherein transfer of large bitmap images can produce poor performance is in the case where on-screen data (OSD) representing a program guide is being delivered from a television set-top box to a digital television. In this situation, the OSD can represent a large bitmap image which transfers very slowly between the set-top box and the digital television, and thus creates a scenario wherein the user must endure delays awaiting completion of the data transfer.” (emphasis added)

Hence, the Applicant has explained by way of explicit teachings and by way of examples that 1) the image in question is a digital bitmap image (this is explicitly claimed, so other image types are irrelevant); 2) the threshold can be set to improve performance; 3) the threshold can be set to approximately a size that corresponds to a size where noticeable delays in display of the digital image would occur, 4) an example of the problem can occur when an OSD representing a program guide is to be displayed (generally defining a representatively large data transfer of a bitmap image), 5) in this illustrative example, the user must endure such delays in the absence of the claimed invention, and 6) that an appropriate threshold can be readily determined experimentally for any given system so that such delays are minimized or data transfer performance is improved. The parameters of the problem to be solved and applied to determining such a threshold are clearly laid out such that minimal experimentation by one of ordinary skill in the art can be used to arrive at a solution for a given system.

It will be readily appreciated by one skilled in the art that the exact value of the threshold in any given system may vary depending upon a number of factors such as: available processing speed, number of pixels and color depth of the bitmap graphic, resolution of the display system, time required to switch to an analog input, time to convert to an analog signal, etc. Accordingly, it is abundantly clear that establishing a “one size fits all” threshold number is not appropriate and is unduly restrictive of the claims. The claims as presented are clear and readily understood

by those skilled in the relevant art. One of ordinary skill in the art would understand that such factors are relevant; but, even if he or she did not understand any of the relevant factors, any engineer seeking to solve the problem could arrive at a suitable threshold by simple trial and error while observing the effect of each trial on delay time to display the image. Once one determines that the delay problem can be solved by use of an analog transmission of the image, the determination of a suitable threshold is submitted to be easy.

The Office Action further poses the question “what if the threshold is set to such a high number that no conversion is necessary and thus no converting step at all and the invention is now only a one-step process which is the step of sending the analog image to the consumer device via the analog interface. In such a case then, what would be the novelty of the invention.” The undersigned respectfully submits that the Office Action’s posed question almost answers itself.* Clearly such a threshold is too high, and one of ordinary skill in the art would know so and not choose such a threshold! Clearly choosing such a threshold is inconsistent with the teachings of the specification. The CAFC addressed a similar issue in Exxon Research & Eng’g Co. v. United States, 265, F.3d. 1371, 60 USPQ2d, 1272 (Fed. Cir. 2001) when it stated that “[a] patent claim to a fishing pole would not be invalid on indefiniteness grounds if it contained a limitation requiring that the pole be ‘at least three feet long’ even though a 50-foot-long fishing pole would not be very practical. ... [T]here is nothing indefinite about the claim language at issue in this case simply because it covers some embodiments that may be inoperable.”

Moreover, while Applicant has stated that a threshold can be determined to 1) improve performance, or 2) to avoid noticeable delays. Thus, determination of an appropriate threshold can be determined by experimentation, there is no evidence of record that an undue amount of experimentation is necessary, and Applicant submits that the amount of experimentation needed for a particular embodiment is in fact quite reasonable and can be determined quite systematically by one having ordinary skills in the art. As noted in the Office Action, if the threshold is too large, the remaining claim acts will not be carried out. Hence, the upper boundary is quite clear. The lower end of the boundary is clearly based upon the tradeoff

* Applicant notes that this question, in fact, misrepresents the claims in that failure to meet the threshold would result in the bitmap image being sent via a digital interface rather than an analog interface as asserted. Claim 1 has been amended to assure clarity in this point.

between improving performance or encountering a noticeable delay and any other disadvantages of displaying using an analog rather than a digital interface for a given system. In the event of no perceived disadvantages, the threshold could be quite low, but would be dependent upon the design tradeoffs of a particular embodiment. Yet, the claims as presented clearly call for a definite process that would be readily understood by one of ordinary skill in the art.

Furthermore, while determining such a threshold value can be accomplished experimentally in a systematic way with minimal effort, there is no single number that is absolutely appropriate for a given system. Hence, the guidance given in the specification is fully adequate to enable one skilled in the art to determine an appropriate threshold. Reconsideration and removal of the rejection based upon indefiniteness is respectfully requested.

In order to even further support Applicant's position in this matter, the Declaration of Narayan Pursaud Jr. (Declarant) is submitted herewith supporting the position that the specification adequately discloses the meaning of the term such that the claims and specification are clearly definite and enabling. It is noted that Declarant is not purported to be one of ordinary skill in the art, and in fact, Declarant admits little practical or classroom experience in the field of the present patent application. One can reasonably presume that as a yet to be degreed engineering student with one year of technical experience as a co-op student who performed testing in a field outside the area of the present technology, and having no significant classroom or practical experience in the field of the claimed invention, the Declarant can in fact be reasonably considered to be well below the level of ordinary skill in the art. Nevertheless, he declares that he could determine an appropriate threshold with only a small to moderate amount of experimentation – certainly not an undue amount (especially considering his level of skill in the art) – after reading and studying the patent application (a task that he indicated to the undersigned took approximately one half hour). He further declares that the scenario proposed by the Examiner is inconsistent with the teachings of the patent, and that the metes and bounds of the threshold are clear to him. It is thus submitted that if the metes and bounds of the threshold appear clear to the Declarant, clearly the disclosure is enabling and the claims definite to one having ordinary skills in this technology. As noted by the Examiner in the first paragraph of

page 3 of the Office Action, “the claims are to be interpreted in light of the disclosure”. Hence, the present declaration and the above remarks clearly refute the Office Action’s position.

Reconsideration and allowance are respectfully requested.

Regarding the Rejections under 35 U.S.C. §103

All claims (1-36) have been rejected as obvious based upon the Japanese publications by Tesujiro in view of Shigeru with certain claims further utilizing Draft EIA-775A, DTV 1394 Interface Specification (hereinafter EIA) submitted by Applicant. Applicant respectfully requests reconsideration of all rejections in view of the following:

As noted in the prior response, and admitted in the Office Action, the claims must be given their broadest reasonable interpretation in view of the specification. Additionally, every word of the explicit language of the claims taken in light of the specification must be taken in consideration.

In rejecting the claims as indefinite, which has been addressed above, the Office Action states “any arguments that this claimed threshold provides patentable distinction over the prior art will be considered unpersuasive”. If Applicant understands this correctly, this means that the Examiner is in fact refusing to consider the explicit language of the claims. This is clearly improper, and the present Office Action is fatally defective on that basis alone. The Examiner’s attention is directed to MPEP 2143.03 which explicitly states as follows:

“2143.03 All Claim Limitations Must Be Considered

“All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

I. INDEFINITE LIMITATIONS MUST BE CONSIDERED

A claim limitation which is considered indefinite cannot be disregarded. If a claim is subject to more than one interpretation, at least one of which would render the claim unpatentable over the prior art, the examiner should reject the claim as indefinite under 35 U.S.C. 112, second paragraph (see MPEP § 706.03(d)) and should reject the claim over the prior art based on the interpretation of the claim that renders the prior art applicable. *Ex parte Ionescu*, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984)” (emphasis added)

Applicant therefore submits that the claims as presented **MUST** be considered including the features relating to the “threshold”, and failure (indeed refusal!) to do so is inherently a failure to establish *prima facie* obviousness and is clearly improper under MPEP 2143.03 (which states that the feature must be interpreted and considered in a further rejection beyond 35 U.S.C. 112 – Not ignored!). Such is clearly the case without regard for whether the limitation is definite (as has been clearly established above). Hence, the limitation must be considered and the limitation has not been shown to be taught or suggested in any of the cited art. Moreover, no line of reasoning has been presented as to why such a feature in combination with the other claim features should be considered obvious.

Additionally, any new rejection purporting to assert the same references cannot be considered final, since the present rejection does not simply fail to consider actual claim features, it in fact improperly refuses to consider them, and fails to establish where such claim features can be found in the cited references. This is clearly erroneous and cannot constitute a proper rejection on the merits. Reconsideration of all claims including all claim features is respectfully requested.

None of the cited art either individually or collectively teaches or suggests all features of the claims as arranged (including the threshold related features which are improperly not being considered), and none of the references taken singly or in combination are adequate to obviate the present claims. Hence, there can be no *prima facie* obviousness. Reconsideration and allowance of all claims are respectfully requested.

Concluding Remarks

The undersigned notes that many other distinctions exist between the cited art and the claims. However, in view of the clear distinctions pointed out above and the failure, indeed refusal, of the Office Action to consider all claim features, further discussion is believed to be unnecessary at this time. Failure to address each point raised in the Office Action should accordingly not be viewed as accession to the Examiner’s position or an admission of any sort.

The undersigned has been explicitly instructed by his client to assure that the application is in condition for appeal, and the additional claims are believed to place the application in better

condition for appeal in view of the current rejection under 35 U.S.C. §112 (which Applicant has more than adequately refuted).

Interview Request

In view of this communication, all claims are clearly in condition for allowance. The undersigned earnestly hopes to work with the Examiner expedite examination of this application and to avoid the necessity of an appeal, and therefore again requests the courtesy of an interview. The undersigned can be reached at the telephone number below.

Respectfully submitted,

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